

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 3-10 and 48 are presently pending in this application, Claims 3, 4 and 8-10 having been amended, and Claim 48 having been newly added by the present amendment.

In the outstanding Office Action, Claims 3-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Usui et al. (U.S. Patent 5,618,764) in view of Tose et al. (U.S. Patent 6,191,186) and Ogihara et al. (U.S. Patent 4,299,873).

Claim 3 has been amended, and Claim 48 has been added herein. These amendment and addition in the claims are believed to find clear support in the claims, specification, and drawings as originally filed.¹ Furthermore, Claims 4 and 8-10 have been amended solely to clarify the subject matter recited therein. Hence, no new matter is believed to be added thereby.

Briefly recapitulating, amended Claim 3 of the present invention is directed to a ceramic paste for ceramic capillary ribs, including a composition of one of a glass powder and a glass/ceramic mixed powder in an amount of from 30 to 95 wt.%, a resin in an amount of from 0.3 to 15 wt.%, and a solvent mixture containing at least one solvent, a plasticizer and a dispersant in an amount of from 3 to 70 wt.%, wherein the composition has a viscosity effective for forming ceramic capillary ribs. By providing such a solvent mixture, the ceramic paste achieves a more effective viscosity for forming ceramic capillary ribs, thereby allowing it to be more uniformly coated on a substrate, and does not drip on the substrate, thus allowing it to form a more desired shape accurately.²

Tose et al. disclose an insulating paste. Nevertheless, Tose et al. do not teach “a solvent mixture containing at least one solvent, a plasticizer and a dispersant in an amount of

¹ See, for example, Specification, page 7, lines 19-22, and page 8, lines 21-29.

² See id., page 7, lines 16-22.

from 3 to 70 wt.%" as recited in Claim 3. On the other hand, Tose et al. simply disclose an insulating paste which may contain a dispersant and a plasticizer as additives.³ Furthermore, nowhere do Tose et al. disclose or even suggest what amount or how these additives should be added. Therefore, the ceramic paste recited in Claim 3 is believed to be patentably distinguishable from Tose et al.

Usui et al. and Ogihara et al. disclose a colored ceramic composition and a multilayer circuit board, respectively. However, neither Usui et al. nor Ogihara et al. teach "a solvent mixture containing at least one solvent, a plasticizer and a dispersant in an amount of from 3 to 70 wt.%" as recited in Claim 3. Specifically, Usui et al. simply disclose a ceramic composition containing polymers dissolved in a solvent.⁴ Ogihara et al. merely disclose a circuit board having a bonding layer and an adhesive composition containing organic adhesives such as epoxy resins.⁵ Therefore, the ceramic paste recited in Claim 3 is believed to be clearly distinguishable from Usui et al. and Ogihara et al.

Because none of Tose et al., Usui et al. and Ogihara et al. discloses the solvent mixture as recited in amended Claim 3, even the combined teachings of these cited references are not believed to render the ceramic paste recited in Claim 3 obvious.

For the foregoing reasons, Claim 3 is believed to be allowable. Furthermore, since Claims 4-10 and 48 depend ultimately from Claim 3, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 4-10 and 48 are believed to be allowable as well.

³ See Tose et al., column 4, lines 7-10.

⁴ See Usui et al., column 4, lines 25-31.

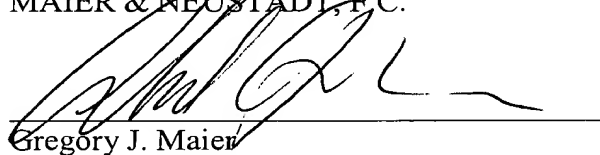
⁵ See Ogihara et al., column 4, lines 1-5.

Application No. 09/240,858
Reply to Office Action of August 18, 2003

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read 'Gregory J. Maier', is written over a horizontal line.

Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)

Akihiro Yamazaki
Registration No. 46,155

GJM/AY/YO:mda
I:\ATTY\YO\OS\0834\0198\AME.DOC